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Definition for Information Modeling; Richard Barker's Model; Object-Role Modeling
eXtensible Markup LanguageSummary and Comments; Unified Modeling Language; Data Modeling Using UML; UML in the Development Process; Chapter Summary; Review Questions; II DATA MODELING FUNDAMENTALS; 3 Anatomy of a Data Model; Chapter Objectives; Data Model Composition; Models at Different Levels; Conceptual Model: Review Procedure; Conceptual Model: Identifying Components; Case Study; Description; E-R Model; UML Model; Creation of Models; User Views; View Integration; Entity Types; Specialization/Generalization; Relationships; Attributes; Identifiers; Review of the Model Diagram
Logical Model: OverviewModel Components; Transformation Steps; Relational Model; Physical Model: Overview; Model Components; Transformation Steps; Chapter Summary; Review Questions; 4 Objects or Entities in Detail; Chapter Objectives; Entity Types or Object Sets; Comprehensive Definition; Identifying Entity Types; Homonyms and Synonyms; Category of Entity Types; Exploring Dependencies; Dependent or Weak Entity Types; Classifying Dependencies; Representation in the Model; Generalization and Specialization; Why Generalize or Specialize?; Supertypes and Subtypes; Generalization Hierarchy
Inheritance of AttributesInheritance of Relationships; Constraints; Rules Summarized; Special Cases and Exceptions; Recursive Structures; Conceptual and Physical; Assembly Structures; Entity Type Versus Attribute; Entity Type Versus Relationship; Modeling Time Dimension; Categorization; Entity Validation Checklist; Completeness; Correctness; Chapter Summary; Review Questions; 5 Attributes and Identifiers in Detail; Chapter Objectives; Attributes; Properties or Characteristics; Attributes as Data; Attribute Values; Names and Descriptions; Attribute Domains; Definition of a Domain
Domain Information

Sommario/riassunto

The purpose of this book is to provide a practical approach for IT professionals to acquire the necessary knowledge and expertise in data modeling to function effectively. It begins with an overview of basic data modeling concepts, introduces the methods and techniques, provides a comprehensive case study to present the details of the data model components, covers the implementation of the data model with emphasis on quality components, and concludes with a presentation of a realistic approach to data modeling. It clearly describes how a generic data model is created to represent truly the ent
